EXHIBITIONS AND NOTICES.

May 10th, 1921.

Dr. A. SMITH WOODWARD, LL.D., F.R.S., Vice-President, in the Chair.

Sir S. F. HARMER, K.B.E., F.R.S., exhibited a mounted specimen of a young female Rhinoceros sondaicus, the one-horned "Javan Rhinoceros," presented by T. R. Hubback, who shot it in Lower Tenasserim, to the British Museum (Natural History). Attention was called to the absence of a horn in the female, a character which Mr. Hubback believes to be normal. A young male of this species, from Java, was formerly exhibited in the Society's Gardens, and was described by Dr. P. L. Sclater, F.R.S. (P. Z. S. 1874, p. 182; Trans. Z. S. ix. p. 649). Although osteological material is to be found in various Museums, there appear to be extremely few mounted specimens in existence. The Javan Rhinoceros, which formerly ranged from Assam to Lower Bengal. the Malay Peninsula, and Java, has become increasingly rare during recent years, and it is in urgent need of protection. Its occurrence in Sumatra and Borneo has been questioned, but reference was made to the statements of W. Volz ('Nord-Sumatra,' vol. ii. p. 372, Berlin, 1912), as proving its occurrence, in limited numbers, in North Sumatra.

Mr. Thos. Gerrard, F.Z.S., exhibited, and made remarks upon, a series of photographs of the skeleton of an old male Kivu Gorilla (Gorilla gorilla beringeri Matschie), the property of Lord Rothschild, and also a series of photographs showing the milk-dentition in the skull of a young African Elephant.

On behalf of Lord Rothschild, Mr. Gerrard exhibited a specimen of a male Kivu Gorilla (Gorilla gorilla beringeri Matschie) mounted by Messrs. Rowland Ward, and stated that it differed from the other races of Gorilla externally by its long, thick pelage, intense black colouring, and the large fleshy protuberance on the top of the head, which often measured 6 inches by 6 inches (i. e. width and height). The skull was much wider at the occiput even than in G. gorilla matschiei Rothschild. The specimen was a very aged male, long past the age of reproduction, and was found solitary, several miles from the two herds inhabiting the region. The specimen was of great pathological

interest, as it was the first instance known of pyorrhea alveolaris in a Gorilla. Habitat Mikeno Volcano, Kivu District.

Mr. D. Seth-Smith, F.Z.S., exhibited a series of skins and photographs of some polyandrous Birds, and described their mating habits.

Dr. Chas. F. Sonntag, F.Z.S., exhibited and made remarks upon, some abnormalities in the Carnivora.

Mr. L. T. Hogben, F.Z.S., and Mr. E. A. Spaul exhibited, and made remarks upon, the effect of Pineal Gland administration on the pigment-cells of Frog Tadpoles.

May 24th, 1921.

Prof. E. W. MacBride, D.Sc., F.R.S., Vice-President, in the Chair.

The Secretary read the following Report on the Additions

to the Society's Menagerie during the month of April:—

The registered additions to the Society's Menagerie during the month of April were 198 in number. Of these 81 were acquired by presentation, 27 were deposited, 84 were purchased, and 6 were born in the Menagerie.

The following may be specially mentioned:—

A pair of Lion Cubs (*Felis leo*), from Somaliland, presented by Sir Geoffrey Archer, K.C.M.G., on April 21st.

2 Sloth-Bear Cubs (*Melursus ursinus*), from the Central Provinces of India, presented by Capt. R. C. Ansdell on April 5th.

2 King Vultures (Gypagus papa), from Tropical America, purchased on April 6th.

2 Spot-billed Toucanets (Selenidera maculirostris), from Brazil,

purchased on April 28th.

A collection of Tropical Fish, including several species new to the Collection, purchased on April 6th.

Miss L. E. Cheesman, F.E.S., exhibited, and made remarks upon, a series of lantern-slides illustrating the habits, in the larval stage, of the Hydropsychidæ (Snare-building Caddis Worms).

Major Stanley S. Flower, O.B.E., F.Z.S., exhibited examples of three species of Egyptian Jerboas—Jaculus jaculus, Jaculus orientalis, and Scarturas tetradactylus, the latter being the first living specimens ever brought to England; and made remarks upon the distribution of the three species in North Africa.

June 7th, 1921.

Prof. J. P. Hill, F.R.S., Vice-President, in the Chair.

Major Stanley S. Flower, O.B.E., F.Z.S., exhibited, and made remarks upon, some living specimens of *Testudo leithii* and ar example of *Testudo ibera*.

Dr. P. CHALMERS MITCHELL, C.B.E., F.R.S., exhibited, and made remarks upon, a photograph of the Death-mask of a young Gorilla, presented to the Society by Prof. Howard Macgregor, of Columbia University, New York.

Dr. Frank M. Chapman gave an account of the distribution of Bird-life in the Urubamba Valley of Peru, and of his expedition down the Urubamba river from its sources in the Puna zone, at an elevation of 14,200 feet, to the Tropical zone at 3500 feet. He reviewed the existing climatic conditions in Peru, and commented on the faunal characteristics of the Puna, Temperate, Subtropical, and Tropical zones encountered in the descent. A comparison of the Avifauna of the forests of the humid Temperate zone (alt. 10,000-12,500 ft.) with that of the adjoining treeless, grass-grown plains and slopes of the Puna zone, showed that that of the first-named area has evidently been derived from the tropical forests at the eastern base of the Andes; that of the latter from the South Temperate zone plains of Argentina and Patagonia. The environmental change experienced in passing from the hot, tropical forests, at the foot of the mountains, to the cold temperate forests near their summits, is much greater than that existing between the plains of Patagonia and those of the Interandine tableland. This is obviously reflected in the degree of differentiation exhibited by the birds inhabiting these elevated forests and plains. Thus 55 per cent. of the genera of birds inhabiting the Temperate zone forests are endemic, while

only 7 per cent. of the genera found on the plains of the Puna are endemic. These facts are believed to indicate that the extent of environmental change, expressed chiefly in climatic conditions, is a more important evolutionary factor than those exerted by time of isolation or extent of distance from the presumed ancestral forms.

Prof. J. P. Hill, F.R.S., V.P.Z.S., exhibited, and made remarks upon, a series of lantern-slides of some Marsupial embryos, dealing especially with the Koala (*Phascolarctos*) and the Wombat (*Phascolomys*).